

U.S. Patent Application Serial No. 10/717,818
Reply to Office Action dated June 6, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) Intake manifold or distributor for an air feed circuit for an internal-combustion engine comprising:

an intake or plenum chamber of elongated shape, having at one longitudinal end an intake aperture, and at least two pipes laterally connected to said chamber, said pipes extending at least partially around said intake chamber from inlet apertures opening therein and having a curved structure over at least a portion of the pipe length, the manifold formed from a first part and a second monolithic part,

~~wherein the manifold consists of two parts, a first part and a second part, produced by injection moulding of a thermoplastic material, wherein the parts are joined to one another in a region of peripheral joint zones located on a joining surface crossing said manifold,~~

the monolithic first part, ~~in one piece,~~ forming a first longitudinal portion of a casing solely defining the intake chamber, an intermediate portion of a side portion of the wall of each of the pipes, and an end conduit segment of each of said pipes ending with an outlet aperture, and

the second monolithic part, ~~in one piece,~~ forming a second complementary longitudinal portion of the casing solely defining the intake chamber, an end conduit segment of each of said pipes ending with and forming ~~an entirety of the inlet aperture of each of the pipes,~~ opening into the intake chamber, and a complementary intermediate portion of a side portion of the wall of each of the pipes;

wherein the first part and the second part are produced by injection molding of a thermoplastic material, wherein the parts are joined to one another in a region of peripheral

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joint zones located on a joining surface crossing said manifold.

2. (Currently Amended) The manifold ~~Manifold~~ according to claim 1, wherein the first longitudinal portion corresponds to a main portion of the casing defining the intake chamber and comprises a joining piece, ~~in one piece,~~ solely defining the intake aperture and wherein the second longitudinal portion corresponds to a cover closing said first longitudinal portion, the joining surface extending mainly below the neutral fibres or the central axes of circulation of the pipes.
3. (Currently Amended) The manifold ~~Manifold~~ according to claim 1, wherein the pipes are connected to one another, between adjacent pipes, by connecting portions in the form of plates or strips formed integrally ~~in one piece~~ with the constituent parts, ~~on the one hand~~ for the second part, at least in the region of the end conduit segments of the pipes opening into the intake chamber and, ~~if necessary,~~ of the longitudinal edges of the complementary intermediate portions of side wall portions of the pipes and, ~~on the other hand~~ for the first part, in the region of the end conduit segments of the pipes defining the outlet apertures and, ~~if necessary,~~ of the longitudinal edges of the complementary intermediate portions of side wall portions of the pipes, ~~these~~ the connecting portions forming an assembly and/or fixing flange in one piece in the region of the end conduit segments defining the outlet apertures.
4. (Currently Amended) The manifold ~~Manifold~~ according to claim 3, wherein the connecting portions of the intermediate portions of side wall portions of pipes of the first and second parts form portions of peripheral joint zones.
5. (Currently Amended) The manifold ~~Manifold~~ according to claim 2, wherein a portion of the second longitudinal portion of the casing forming the cover also forms a portion of the walls of the end conduit segments of said pipes ending in the respective inlet apertures.
6. (Currently Amended) The manifold ~~Manifold~~ according to claim 1, wherein the end conduit segments of the pipes opening into the intake chamber comprise circulation axes which are substantially rectilinear and located in respective mutually parallel planes, the segments

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being obtained by ~~moulding by means of~~ molding a core displaced in translation, optionally in two different directions.

7. (Currently Amended) The manifold ~~Manifold~~ according to claim 1, wherein the end conduit segments of the pipes opening into the intake chamber comprise curved circulation axes located in respective mutually parallel planes, ~~these~~ the segments being obtained by ~~moulding by means of~~ molding a rotary core.

8. (Currently Amended) The manifold ~~Manifold~~ according to claim 1, wherein the segments of the conduits of the pipes opening into the intake chamber comprise curved circulation axes with a helical development, these segments being obtained by ~~moulding by means of~~ molding a rotary core displaced with a combined rotational and translatory movement.

9. (Currently Amended) A method ~~Method~~ for producing ~~an~~ the intake manifold or distributor ~~according to~~ of claim 1, the method comprising: ~~wherein it consists in~~

separately producing the first part and the second part by injection ~~moulding~~ molding of thermoplastic material, ~~whether reinforced or not,~~ the second part optionally being produced by a ~~mould~~ mold with a rotary ~~core; and~~ core, then

joining ~~these two~~ the first and second parts by vibration welding in the region of peripheral joint zones.